AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please insert the following new paragraph [0008A] on page 2, after paragraph [008]:

[008A] Brief Description of the Drawings

Fig. 1 shows a random polymer obtained by classical radical polymerization of two monomers, and a gradient copolymer.

Fig. 2 shows a schematic representation of different polymers obtained from a styrene/methacrylic acid gradient copolymer.

Fig. 3 shows an NMR analysis of the gradient copolymer of Example 1.

Fig. 4 shows a chromatograph of the gradient copolymer of Example 1 obtained from a liquid adsorption chromatography analysis.

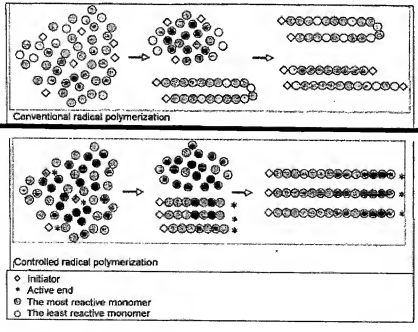
Fig. 5 shows a schematic representation of the gradient copolymer of Example 1.

Fig. 6 shows calculated gradients determined for each monomer of the gradient copolymer of Example 4.

Fig. 7 shows flow profiles of the inventive gradient polymer and comparative diblock copolymer in Example 9.

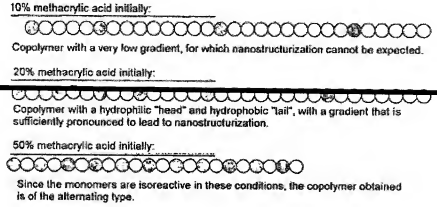
Please amend paragraph [037] as follows:

[037] As shown in Fig. 1, ~~the following scheme~~, for illustration purposes, a random polymer obtained by classical radical polymerization of two monomers will differ from a gradient copolymer in the distribution of the monomers, in that a random polymer is normally not identical on all the chains, nor in the length of the said chains, which is normally not identical for all the chains.



Please amend paragraph [057] as follows:

[057] In the case of a styrene/methacrylic acid gradient copolymer, the different polymers obtained can be represented schematically as demonstrated in Fig. 2, ~~follows~~, with the white units corresponding to styrene and the dark units corresponding to methacrylic acid.[[:]]

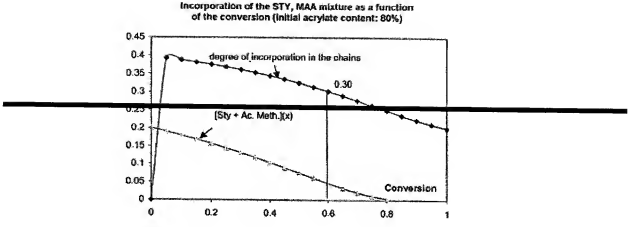


Please amend paragraph [058] as follows:

[058] The structure of ~~these~~ the polymers shown in Fig. 2 may be determined by the disappearance of the methacrylic acid as a function of the degree of conversion.

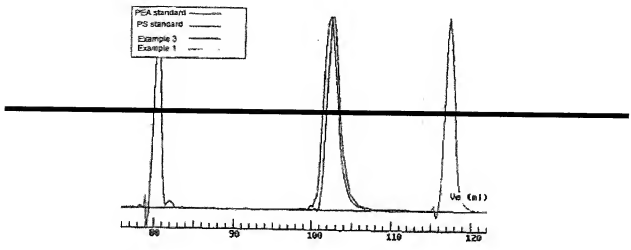
Please amend paragraph [156] as follows:

[0156] Using these methods, it was found that at 60% conversion, the final chemical composition of the copolymer was as follows (wt%): 68.4% ethyl acrylate, 16.1% styrene and 15.5% methacrylic acid according to NMR on the calculated curve (69%) demonstrated in Fig. 3.



Please amend paragraph [157] as follows:

[0157] Using LAC, the trace of the polymer showed the low polydispersity of the chemical composition of the chains, as demonstrated in Fig. 4.



Please amend paragraph [161] as follows:

[0161] ~~The following was~~ Figure 5 demonstrates a possible schematic representation of the copolymer that was obtained[[:]],

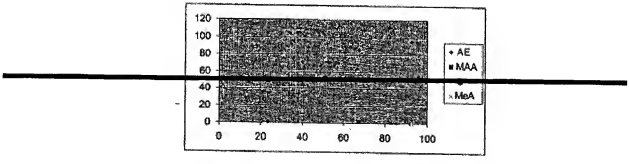
wherein the darkened units denote the styrene/methacrylic acid linkages, and the white units denote the ethyl acrylate linkages.

Please amend paragraph [168] as follows:

[0168] The final composition of the copolymer was found by liquid adsorption chromatography (LAC), which showed similarity of composition with the copolymer prepared in example 1 and absence of homopolymer in the materials. This was illustrated by ~~curve 1 above~~ Fig. 4 given in example 1.

Please amend paragraph [174] as follows:

[0174] It was noted that each monomer was present throughout the reaction. The gradient determined for each monomer could then be calculated, and gave the ~~following~~ curves demonstrated in Fig. 6.[[:]]



Please amend paragraph [193] as follows:

[0193] Thus, a system obtained with a gradient copolymer, even when used at high concentration, was thinner (low viscosity at rest) than that obtained with a chemically equivalent diblock, used at a far lower concentration, as demonstrated in Fig. 7.